## PCT/NZ2004/000243

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## CERTIFICATE

This certificate is issued in support of an application for Patent registration in a country outside New Zealand pursuant to the Patents Act 1953 and the Regulations thereunder.

I hereby certify that annexed is a true copy of the Provisional Specification as filed on 6 October 2003 with an application for Letters Patent number 528707 made by EFFECTIVE MANAGEMENT SYSTEMS LIMITED.

Dated 8 November 2004.

PRIORITY DOCUMENT

SUBMITTED OR TRANSMITTED IN COMPLIANCE WITH RULE 17.1(a) OR (b)

Neville Harris Commissioner of Patents, Trade Marks and Designs



Intellectual Property Office of NZ

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Our ref: ROG001 Patents Form No. 4

PATENTS ACT 1953

## PROVISIONAL SPECIFICATION

## INFORMATION DISPLAYING DEVICE AND METHOD

We, EFFECTIVE MANAGEMENT SYSTEMS LIMITED, New Zealand company, of 37 Moncrieff Avenue, Nelson, New Zealand, do hereby declare this invention to be described in the following statement:

This invention relates to information displaying devices and methods. More particularly, but not exclusively, the present invention relates to a computer software program and associated devices adapted to display information when a computer is generally instructed to undergo processing tasks rendering the user unable to use the computer until that task has been completed.

Personal computer users often experience "down time" when a computer is in the process of carrying out tasks such as virus checking, printing files or pages of documents, and starting new applications. In many applications the hourglass icon appears as a symbol of the computer being tied up with processing tasks. In other programs a pop up window may display the message "please wait". The amount of time that can be cumulatively wasted during such events can be significant.

It is a non-limiting object of the invention to provide a computer program for displaying information and/or data and/or graphics and/or audio and the like on a computer monitor at predetermined intervals when the computer is otherwise processing that overcomes at least some of the abovementioned problems, or at least to provide the public with a useful choice.

According to a broad aspect of the invention there is provided a computer program for use in a computer to utilise time periods otherwise spent waiting, the program including the steps of:

- a. activating the program when a predetermined event has occurred;
- displaying information and/or data and/or graphics and/or audio on a computer monitor; and
- suspending the program when the predetermined event has ended.

Advantageously the information is arranged and configured in an informative manner for educational and/or entertainment purposes.

Preferably the program includes the further step d. of recommencing the program at step a. when a second or subsequent predetermined event occurs. Desirably the program is

configured to recommence at the point where it was suspended by the ending of a predetermined event, and to continue with step b. until step c. reoccurs.

Preferably the program displays information and/or data and/or graphics, and/or audio sequentially. Alternatively the program displays data and/or graphics, and/or audio randomly.

Preferably the program includes the preliminary step (i) of preselecting the desired datafile from a list of selectable datafiles, the datafiles being in the form of information and/or data and/or graphics and/or audio and the like.

The invention will now be described by way of example only with reference to the accompanying drawings in which:

Figure 1: Shows a flow chart of broad processing steps of the invention.

Referring to figure 1, a flow chart of a computer program, generally referred to as 1, according to one embodiment of the invention, is illustrated.

It is an advantage for a computer user to constructively use the time available when the computer is busy carrying out a variety of processing tasks such as loading files, downloading files and web pages or otherwise.

According to one aspect of the invention there is provided a computer program 1 that functions during the "downtime" encountered from time to time with computer use and associated peripherals or during any other event or episode defined as a "predetermined event". The program advantageously includes the step a. of activating a start routine of the program when such a predetermined event has occurred.

The predetermined event may include, but is not limited to, an hourglass cursor or other cursor as preferred by a user and as installed on the computer. The cursor indicates that the computer is executing a command or that the computer is in a "busy" mode or state, such as, for example, activity by a web browser. Other episodes or predetermined events can include time periods when a "please wait" message in a pop up window that occurs when a

program is being run or a file is being loaded, or when a user is connecting to a remote server via a modem, or when a document is being printed, or during virus checking routines, or during data back up routines or during logging on operations and delays generally encountered when internet browsing.

Further, and by way of non-limiting example only, the predetermined event can include any event associated with the operation of a computer/CPU such as defragmenting, scanning, booting up, logging on, logging off, printing, virus scanning or cleaning, internet connecting, web browser use, and can also include any event associated with a peripheral device such as, for example, a printer, scanner, facsimile, telephone, second computer and network action, and any other delay event associated with computer use.

It is envisaged that the program 1 may be configured to operate as an alternative to a screen saver operating.

Once step a. has occurred, the program moves to execute step b. with using the downtime encountered or predetermined event to load and run a desired library of information or datafile or other such file broadly referred to hereinafter as a "datafile". The "datafile" may include, but is not limited to, displaying information and/or data and/or graphics and/or sound in the form of wave files and the like, and/or video files, on a computer monitor and through an audio system.

A datafile can include a plurality of "snippets" of any desirably quantity. A "snippet" is a term given to a unit of information, text, video, graphics, sound and the like. In a non-limiting example of a snippet, it may comprise text in the form of a quotation, and a datafile may include 365 or 730 snipppets in a datafile of quotations.

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The types of files that may be configured and arranged include educational and recreational programs and programs for entertainment. Some non-limiting examples include dictionaries, language learning, famous quotes in desired categories such as politics, philosophy, economics, social, religious or otherwise, jokes, anecdotes, religious verses, almanacs, encyclopaedic categories (such as sporting facts in a selected group, world records, travel or geographical facts, historical facts, art history or artwork in a variety of selected groupings, and any other desirable categories), cooking recipes and tips,

medical aids or remedies, stock market information or tips, news events or news history, or any other desirable information and/or data and/or graphics and the like.

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The libraries of information or datafiles may be encoded and locked for use by an individual computer. This may be particularly useful in applications whereby commercially sensitive information is being displayed periodically.

In one embodiment the datafile may be configured to display multiple information in "block" calendar form for each day of the year, the blocks each having selectable categories such as weather information for the day, a quote, foreign language instructions, or any of the information itemised above under educational and recreational programs and programs for entertainment. That way, at least two blocks or boxes are set up to simultaneously display the desired information or data and the like during step b. of the program.

Alternatively other types of files can be run during the predetermined period in step b. including mpeg or wave files or video-type files displaying movies, short films, comedy, music videos and the like.

Preferably the program 1 includes the preliminary step i.) of preselecting the desired datafile for the program 1. Desirably the preselection is from a variety of datafiles on a variety of subject matter and interests.

It is envisaged that such data or displayed information or otherwise will run for the period of the predetermined event. In accordance with step c. the program is suspended when the predetermined event has ended.

Desirably, step d. of the program may be configured to continue the program to display further information, data, graphics and/or other types of files as abovementioned, when a second predetermined event has occurred. Advantageously the program may recommence at the point of the datafile or other file at the point at which it was suspended during the previous end of the predetermined event, and to continue with step b. until step c. occurs.

It is envisaged that the program 1 will be adapted such that step d. will not occur if the duration of the predetermined event is too brief or short and that a predetermined minimum time period can be set or logic used to determine if the delay event will be long enough to allow the user to see the displayed material under step b. during the predetermined delay event.

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In one non-limiting embodiment the datafile may run sequentially through each item or frame for display until all the items are displayed, and then may desirably repeat the sequence from the first frame to the last frame. The number of items or frames may be any number, and may be 365 items whereby one item is displayed repeatedly for each day only, and then changed for each day of the year, or otherwise as desired. Alternatively a datafile may comprise 730 snippets or items, and displaying of the snippets may be by selection of two snippets rather than just one. Alternatively the program may be configured to randomly select and display snippets.

The datafile may comprise thousands of snippets of information for display and therefore during each predetermined event may display information for a maximum amount of time, say 15 seconds, and then move sequentially to the next snippet or item.

The program 1 may be desirably adapted to include functionality in the form of selectable or tuneable user preferences. Such set up preferences may include the time in seconds that the snippet will remain visible after the delay event is completed, and selecting the datafile or library from the list of datafiles available. The font size, window size and colours, background colour and/or pattern may be selectable, and such selectability can be customised given the display resolution and screen size available on the particular computer to which the program 1 will be active.

User preferences can include selecting the mode of application and such modes, in one non-limiting application may include a calendar mode whereby snippets are displayed as linked to a particular date; a random mode whereby any snippet may be displayed on any one day and/or a snippet is repeated throughout one day and/or one snippet is repeated a set number of times per day and/or a selectable number of snippets are displayed for any one day; a display mode whereby a datafile can be selected and displayed as required; and a screen saver mode allowing the program 1 to run as a screen saver.

It is envisaged that the libraries or datafiles can be run continuously and without interruption for pre-screening purposes as required, and as such the program is therefore not limited in operation only to operate when a delay event occurs.

Selectability may include being able to select snippets of information sequentially from only one datafile or randomly from one datafile, or from a number of datafiles, as desired.

It is envisaged that these datafiles may be upgraded or updated or replaced with new or different information for display or to run during step b. of the program. The program is desirably configured and arranged to allow a user to download a new datafile from a remote website server available over the global internet and enable the program 1 to run any desirable sequence.

It is envisaged that the displayed material may be introduced on screen as a gradual fade in and fade out image as desired.

It is further envisaged that the visual features of the information and audio datafiles may include any size and shape and colours, and even cartoons, whether static or animated, may be included in the program 1 with or without text.

It is further envisaged that audio may form a desirable function with the datafiles displayed or run as such audio can be desirable with language learning datafiles, movies or concert viewing or otherwise.

It is yet further envisaged that live streaming may form part of the program 1 during step b. in that when a predetermined event occurs, data from security cameras or from a remote webcam at any location can be streamed through to the computer and be displayed on screen, whether with audio or without. Further, live streaming may be provided from any desirable source such as, for example only, news from a news channel or stock market diagrams, charts, figures and details from a stock market firm.

It will be appreciated according to an aspect of the invention that the datafiles can be loaded onto any form of computer whether a desktop computer, portable computer or

laptop, personal digital assistant (PDA), portable cellphone, or other useful and desirable device.

It is envisaged according to an alternative aspect of the invention that the datafiles may be loaded or run on a stand alone device, whether dedicated or incorporating other desirable features. In one non-limiting example only, the stand alone device may be integrated with a desk calendar and clock option and be portable in that it the device can be locatable beside a computer monitor. The stand alone device may have any desirable size of screen. Advantageously the stand alone device may be suitably interfaced with a computer as required. Various datafiles may be downloadable to the stand alone device, and can be changed and modified as desired. In operation, a start button can be activated to commence the operation of the program and with viewing snippets in the datafiles. A stop button can be also provided to end and/or suspend the operation. Other functions of the stand alone device can be as previously described with reference to the computer program 1.

Wherein the foregoing description reference has been made to integers or components having known equivalents then such equivalents are herein incorporated as if individually set forth.

Although this invention has been described by way of example of possible embodiments, it is to be appreciated that improvements and/or modifications may be made thereto without departing from the scope of the present invention.

EFFECTIVE MANAGEMENT SYSTEMS LIMITED

By their attorneys

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SCHUCH & COMPANY

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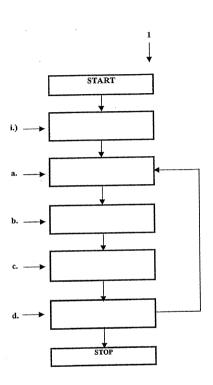


FIGURE 1